

WHAT IS CLAIMED IS:

1. A method for switching an operation mode from a non-USTS (Uplink Synchronous Transmission Scheme) to a USTS mode in a Node B capable of communicating with a UE (User Equipment) in both the non-USTS mode and the USTS mode, comprising the steps of:

calculating a difference value between a start point of a downlink dedicated channel frame in a downlink dedicated channel transmitted to the UE in the non-USTS mode and a start point of an uplink dedicated channel frame in an uplink dedicated channel received from the UE;

determining a first control value for controlling the start point of the uplink dedicated channel frame in the uplink dedicated channel from the UE by comparing the difference value with a given reference value;

determining a second control value such that the second control value for the start point of the downlink dedicated channel frame in the downlink dedicated channel of the Node B becomes a multiple of a given number of chips;

informing the UE of the determined first and second control values; and

transmitting a downlink dedicated channel signal such that the start point of the downlink dedicated channel frame becomes a start point determined based on the second control value.

2. The method as claimed in claim 1, wherein the reference value is a common delay time for uplink dedicated physical channels from UEs belonging to the Node B.

3. The method as claimed in claim 2, wherein the common delay time is a value shared by all of the UEs using a same cell or a same USTS scrambling code, and is set such that uplink dedicated physical channel signals received at the Node B from the UEs have a specific delay.

4. The method as claimed in claim 1, wherein the given number of chips is 256.

5. The method as claimed in claim 1, wherein the dedicated channel is a dedicated physical channel.

6. A method for connecting with a Node B in a USTS mode by a UE operating in a non-USTS mode in a cell region of the Node B, comprising the steps of:

receiving from the Node B a first control value for controlling a frame start point for an uplink dedicated channel signal and a second control value for controlling a frame start point for a downlink dedicated channel signal;

receiving a frame for the downlink dedicated channel signal from the Node B based on the second control value; and

transmitting the uplink dedicated channel signal frame to the Node B based on the first control value, after receiving the downlink dedicated channel signal frame.

7. The method as claimed in claim 6, wherein the first control value is used for controlling a start point of the uplink dedicated channel frame of the UE by comparing: (a) a difference value between a start point of an uplink dedicated channel frame transmitted to the Node B in the non-USTS mode and a start point of a downlink dedicated channel frame transmitted from the Node B, with (b) a reference value previously given to the Node B.

8. The method as claimed in claim 6, wherein the second control value is used for controlling a start point of the downlink dedicated channel frame from the Node B to become a multiple of a given number of chips.

9. The method as claimed in claim 6, wherein the dedicated channel is a dedicated physical channel.

10. The method as claimed in claim 8, wherein the given number of chips is

5 256.